



United States Patent and Trademark Office



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NOTICE OF ALLOWANCE AND FEE(S) DUE

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7590

12/16/2002

FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 EXAMINER

YANG, RYAN R

ART UNIT CLASS-SUBCLASS

2672

345-430000

DATE MAILED: 12/16/2002

				
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506.382	02/18/2000	Kiyohide Sato	2355 11107	9555

TITLE OF INVENTION: MARKER LAYOUT METHOD, MIXED REALITY APPARATUS, AND MIXED REALITY SPACE IMAGE GENERATION METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE		DATE DUE	
nonprovisional	NO	\$1280	\$0	\$1280	03/17/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for

maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 12/16/2002 05514 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile **NEW YORK, NY 10112** transmitted to the USPTO, on the date indicated below. (Depositor's name (Signature (Date FILING DATE APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/506.382 02/18/2000 Kiyohide Sato 2355,11107 TITLE OF INVENTION: MARKER LAYOUT METHOD, MIXED REALITY APPARATUS, AND MIXED REALITY SPACE IMAGE GENERATION METHOD APPLN. TYPE SMALL ENTITY ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1280 \$0 \$1280 03/17/2003 **EXAMINER** ART UNIT CLASS-SUBCLASS YANG, RYAN R 2672 345-430000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. single firm (having as a member a registered attorney or agent) and the names of up to 2 ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): A check in the amount of the fee(s) is enclosed. ☐ Issue Fee Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee ☐ Advance Order - # of Copies The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, D.C. 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION		
09/506,382	02/18/2000	Kiyohide Sato	2355.11107	8555	
05514 75	590 12/16/2002	· [EXAMINER		
	CELLA HARPER &	SCINTO	YANG, RYAN R		
	30 ROCKEFELLER PLAZA NEW YORK, NY 10112			PAPER NUMBER	
UNITED STATES			2672		
			DATE MAILED: 12/16/2002		

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION N		
09/506,382	02/18/2000	Kiyohide Sato	2355.11107 8555		
05514	7590 12/16/2002		EXAMINER YANG, RYAN R		
	K CELLA HARPER &	SCINTO			
30 ROCKEFELLER PLAZA NEW YORK, NY 10112		[ART UNIT	PAPER NUMBER	
UNITED STAT	ES		2672		
			DATE MAILED: 12/16/2002		

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

)	<u>~</u> _	
	Application No.	Applicant(s)		
Notice of Allowahility	09/506,382	SATO ET AL.		
Notice of Allowability	Examiner	Art Unit		
	Ryan R Yang	2672	<u>-</u>	
The MAILING DATE of this communication apperalled all daims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication GHTS. This application is subject to and MPEP 1308.	oplication. If not include n will be mailed in due	ed course. THIS	
 This communication is responsive to <u>amendment filed 11/2</u> The allowed claim(s) is/are <u>1-3,5-8 and 15-21</u>. 	<u>:772002</u> .			
 3. The drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 18 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the drawings filed on 20 February 2000 are accepted by the accepte	he Examiner.			
 4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the: 				
 Certified copies of the priority documents have 	been received.			
2. Certified copies of the priority documents have	been received in Application No	<u></u> .		
 Copies of the certified copies of the priority doc International Bureau (PCT Rule 17.2(a)). 	cuments have been received in this	national stage applica	tion from the	
* Certified copies not received:				
5. Acknowledgment is made of a claim for domestic priority ur		ional application).		
(a) The translation of the foreign language provisional a				
6. Acknowledgment is made of a claim for domestic priority ur	ider 35 U.S.C. §§ 120 and/or 121.			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the complyment of the complex comp				
7. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which gives reas			NOTICE OF	
8. CORRECTED DRAWINGS must be submitted.				
(a) including changes required by the Notice of Draftspers	son's Patent Drawing Review (PTC)-948) attached		
1) hereto or 2) to Paper No				
(b) including changes required by the proposed drawing of	correction filed, which has b	een approved by the E	Examiner.	
(c) ☐ including changes required by the attached Examiner'	s Amendment / Comment or in the	Office action of Paper	No	
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.				
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T			Note the	
Attachment(s)				
 1⊠ Notice of References Cited (PTO-892) 3□ Notice of Draftperson's Patent Drawing Review (PTO-948) 5□ Information Disclosure Statements (PTO-1449), Paper No 7□ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	4□ Interview Summ 6□ Examiner's Ame	nal Patent Application (I nary (PTO-413), Paper endment/Comment ement of Reasons for A	No	

Application/Control Number: 09/506,382

Art Unit: 2672

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

As per claim 1, the closest prior art by Crane et al. (6,054,991) do not explicitly disclose in a marker layout method the step of "the markers to be used by only the given player are laid out at positions hidden by real objects when the markers are observed from the other player".

As per claims 15, 16, 18-21, the closest prior art by Crane et al. do not explicitly disclose in a mix reality space image generation, a marker layout method the step of

"substituting or overlaying images of the marker regions by predetermined virtual object images".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiries

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Yang whose telephone number is (703) 308-6133.

Page 3

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Michael Razavi**, can be reached at **(703) 305-4713**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ryan Yang December 6, 2002

JEFFERY BRIEN
PRIMARY EXAMINER

Iffing a. Bines